

Work Order ID 163692

Thursday, July 06, 2017 10:54:00 AM

163692

Page 1

Item ID: D2364

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Deck Plate Fwd

Start Date: 7/11/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 7/21/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: DAS Date: JUL 06 2017 Tooling: _____ Date: _____
QC: 9-09 Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2364	Rev G								

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.44

FLOW CNC Waterjet

1-Cut as per Dwg D2364

Dwg Rev: GProg Rev: G

2-Deburr if necessary

(4) _____ 07/07/15

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.04

Quality Control

(4) _____ 07/07/15

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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OTHER :																									

Thursday, July 06, 2017 10:54:00 AM

163692

Page 2

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 7/11/2017 **Start Qty:** 4.00 ***4***

Cust Item ID:

Required Date: 7/21/2017 **Req'd Qty:** 4.00 ***A***

Customer:

Reference:

Run Start *NR.1*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

**Insp.
Stamp**

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.08

Quality Control

JUL 17 2017

0.00

130

Small Fab

Small Fab

Memo

0.42

Small Fab

1- Counter sink holes as per dwg D2364

2- deburr if necessary

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.08

Quality Control

DAS
38
9-89
JUL 18 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
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Page 3

Item ID: D2364 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
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 Start Date: 7/11/2017 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 7/21/2017 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.30				(X4)	Ø	2017/07/31	BEB
160 *160* Powdercoat Powder Coating	Black Sandtex(Ref.4.3.5.7) per QSI005 4.3 <i>M 136370</i> Memo START TIME: <i>1:45</i> OVEN TEMPERATURE: <i>20</i> FINISH TIME: <i>2:15</i>	0.00 0.20				4	Ø	170731	38 38
170 *170* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.04				4			DAS 38 9-80 AUG 01 2017

DQA: _____ Date: _____



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Page 4

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Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Deck Plate Fwd

Start Date: 7/11/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 7/21/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Identify as per dwg & Stock Location <i>St225A</i>	0.00							
180									
Packaging	Memo	0.04							
Packaging									
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.40							
Quality Control									

DAS
4 6
9-89

AUG 02 2017

17/8/2 JH

AUG 02 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Picklist Print

Thursday, July 06, 2017 10:54:05 AM

Page 1

Work Order ID: 163692

163692

Parent Item: D2364

D2364

Parent Item Name: Deck Plate Fwd

Start Date: 7/11/2017

Required Date: 7/21/2017

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV. E00.06.26 Removed P/O for powder coatEC
IPP Rev:F Now On Waterjet 06-07-03 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.063		Purchased		No		100	sf	75.5400	0.6469	2.72379			

M2024T3S 063

2024-T3 .063 sheet

**

2.9

06/17/07/15

Location

Loc Qty

Loc Code

MAT

2.4

m135512

2.4

MAT009

73.14

m134640

9.14

m135612

4.6

m137218

24.8

m137599

34.6

2.2

.7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DART AEROSPACE LTD		Work Order:	163692
Description: Litter Deck Plate Kit (350)		Part Number:	D2364
Inspection Dwg: D2364 Rev: G		Page 1 of 1	

INSPECTION SHEET

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
6.624	+/-0.010	6.626			1/2" dia	
Ø0.171	+0.005/-0.000	Ø.172			Tap	
0.354	+/-0.010	.355				
11.242	+/-0.010	11.244				
3.031	+/-0.010	3.033				
1.903	+/-0.010	1.905				
1.128	+/-0.010	1.129				
0.354	+/-0.010	.355				
1.340	+/-0.005	1.339				
2.326	+/-0.010	2.328				
3.312	+/-0.010	3.314				
4.298	+/-0.010	4.299				
5.284	+/-0.010	5.286				
6.151	+/-0.010	6.153				
6.270	+/-0.010	6.272				
0.354	+/-0.010	.354				
3.031	+/-0.010	3.032				
Ø0.656	+0.005/-0.000	Ø.656				
5.003	+/-0.010	5.005				
4.605	+/-0.010	4.606				
1.776	+/-0.010	1.778				
0.980	+/-0.010	.982				
4.487	+/-0.010	4.487				
7.192	+/-0.010	7.192				
7.567	+/-0.010	7.569				
7.942	+/-0.010	7.944				
Ø0.191	+0.005/-0.000	Ø.192				
Ø0.197	+0.005/-0.000	Ø.199				
11.145	+/-0.010	11.146				
12.181	+/-0.010	12.181				
11.776	+/-0.010	11.777				
0.250	+0.005/-0.000	.252				
3.141	+/-0.010	3.144				
0.171	+0.005/-0.000	.173				

Measured by:	de	Checked by:	38 9.89	QC Inspector:	
Date:	17/07/15	Date:	JUL 17 2017	Date:	

Engineering Approval: (If necessary)		Date:	
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Rev	Date	Change	Revised by	Approved
A	04.06.25	New Issue P/O D350-616-015	KJ/JLM	
B	08.05.28	7.567 dimension revised	KJ/DD	
C	16.05.30	Dimensions revised per Dwg Rev G	KJ	

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

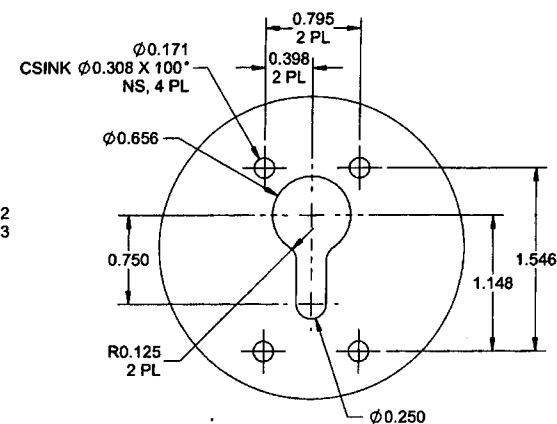
Work Order update only ☐

Work Order: _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS					
Part No. _____		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Large Fab ☐	Composite ☐	Supplier ☐			

Date : _____	Step #: _____	QTY Effective : _____	MRB (QSI042) Approval ☐
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Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : ☐			



D2364 LITTER DECK PLATE

RELEASED
2016-04-18
ECN 16-562

G	REFORMAT DWG TO CURRENT STD. REVISE NOTE 1: THICKNESS WAS 0.063-0.071; REVISE NOTE 2: "BLACK SANDTExT" (4.3.5.7) WAS "BLACK CRINKLE" (4.3.5.3); ZN B4: 13.14 WAS 12.480. REASON: PAR15-415.	MB	15.10.28
F	0.063-0.071 THICK WAS 0.071 (TSR A371)	KE	98.06.19
E	GEOMETRY CHANGES	BW	95.10.06
D	0.191 WAS 0.187	BW	95.03.06
B	MOVED KEYWAY	BW	95.02.08
A	NEW ISSUE	BW	95.01.14
REV.	DESCRIPTION	BY	DATE

DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D2364 TITLE LITTER DECK PLATE, 350 COPYRIGHT © 1993 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED BY THE EXERCISE OF CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	REV. G
DRAWN	MB		SHEET 1 OF 1
CHECKED	AJS		SCALE
MFG. APPR.	JLM		NT
APPROVED	WM		
DE APPR.	DS		
DATE	15.10.28		

- NOTES:**
- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.063 THICK, PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209
REF. DART SPEC. M2024T3S.063
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
"POWDER COAT "BLACK SANDEX" (4.3.5.7) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2364" AND B/N "BXXXXXX" PER DART QSI 044 6.1
 - 7) WEIGHT: 0.42 lbs

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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OTHER : _____																																																															